

CLAIMS

1. A semiconductor laser device comprising a semiconductor laser element arranged inside an airtight-sealed package, the semiconductor laser element having an active
5 region made of one material selected from the group consisting of an AlGaAs-based crystal, an AlGaInP-based crystal, an AlGaN-based crystal, and an InGaN-based crystal, wherein an atmospheric gas inside the package contains oxygen.

2. The semiconductor laser device of claim 1,
10 wherein the semiconductor laser element has a dielectric oxide film formed on a laser emission surface thereof.

3. The semiconductor laser device of claim 1,
wherein the atmospheric gas is a mixture of oxygen and nitrogen, with an oxygen
15 content of 20% or more.

4. The semiconductor laser device of claim 1,
wherein the semiconductor laser element emits light having a wavelength of 0.9 μm or
less.

20 5. A semiconductor laser device comprising a semiconductor laser element arranged inside an airtight-sealed package, the semiconductor laser element operating at a rated output power of 30 mW or more, wherein an atmospheric gas inside the package contains oxygen.

6. The semiconductor laser device of claim 5,
wherein the atmospheric gas is a mixture of oxygen and nitrogen, with an oxygen
content of 20% or more.

5

7. A semiconductor laser device comprising a semiconductor laser element
arranged inside an airtight-sealed package, the semiconductor laser element having an active
region made of one material selected from the group consisting of an AlGaAs-based crystal,
an AlGaInP-based crystal, an AlGaN-based crystal, and an InGaN-based crystal, the
10 semiconductor laser element operating at a rated output power of 30 mW or more,
wherein an atmospheric gas inside the package contains oxygen.

8. The semiconductor laser device of claim 7,
wherein the atmospheric gas is a mixture of oxygen and nitrogen, with an oxygen
15 content of 20% or more.